





## SINS OF OMISSION

T's a sad fact but true: the world is full of what ifs. Nowhere is this more so than in the world of motorcycling. With hindsight it is easy to play the what-might-have-been game, and you can bet your bottom dollar that several motorcycle manufacturers would swap their eye teeth for a chance to get their hands on a time machine.

Imagine that the year is 1968 and that there are four advanced design two-strokes on the Australian market. It shouldn't be that hard to imagine, since it did happen. These machines featured rotary valves, direct, crankshaft-driven oil injection, twincam brakes, oil-level windows and other advanced bits and pieces. They were pretty and they were fast. They were Bridgestones. Well what else can you call it when a motorcycle manufacturer bites the dust? Jeremy Bowdler rides some Bridgestones and decides that, more than a sin, it's a tragedy.

Now imagine that the other Japanese factories quietly suggested that, were Bridgestones to continue the manufacture of motorcyles, then they would stop using Bridgestone tyres as standard equipment. Bridgestone unfortunately complied, and the result is that today Bridgestone is a name associated only with tyres.

Now imagine (for the third and last time) what a 1990 Bridgestone might have been

like. For any manufacturer to stop producing motorcycles is a sorry tale. Having ridden the three Bridgestones in this story, I can honestly say that in this case it was a tragedy. They would have been number one.

In the early '60s, an American, Lou Emery, commissioned Bridgestone to make a 50cc step-through, in an attempt to get in on the small-bore Japanese market. A variety of models followed in 90, 100, 175 and 350cc form and commuter, sports and street-scrambler style. At the time of their withdrawal, there was also talk of a 500.

In addition to the road bikes there were 50cc and 90cc GP bikes, and the 350 was raced with some success by Frank Hodder in Australia. The 90cc bike was good for almost 160km/h, and lapped Fisco at an



average of 145km/h. Stan Bayliss placed in a 250 production race at Oran Park on a 175, and he was a *big* man.

There was an unknown number of these bikes imported into Australia — there is talk of about 60 350s, but no one knows for sure. They certainly are a rare sight on the roads today. The story might very well have ended there but for the efforts of two Sydneysiders who decided to resurrect examples of the marque.

Michael and Tony actually met through their passion for Bridgestones, with Tony lying in wait for Michael to collect a bike that he had been 10 minutes late in enquiring about from the Trading Post. After that they swapped information, parts and expertise and now, between the two of them, have beautifully restored examples of a 100 Sport, a 175 Dual Twin and a 350 GTR, as well as a few more awaiting restoration or for parts.

A real estate valuer by trade, Tony began his obsession with the Japanese mar-



que in 1968 when he was walking down Wentworth Avenue looking for a new bike (his first) with \$400 in his pocket. His attention was captured by a 100cc Bridgestone. In particular, he was drawn to it because of the quality of its manufacture and the nice details which abounded things such as adjustable handle-bar levers, grease nipples on the cables, a cable rear brake instead of the ubiquitous rod system and the cable clamps over the headlight to ensure correct routing, not to mention the liberal use of stainless steel and chrome. The decision to buy was easy . . .

Michael, now a technical officer at the University of Sydney, used to come home from school to ride around on what can best be described as a butchered Bridgestone paddock-basher. His fondness for the engine stuck, and some years later, in 1982, he became the owner of a 100. He decided to keep it standard when a second bike found its way into his garage, and the seat, engine and pipe were put to good use. The project was completed by the end of '84 and the bike has been registered since 1986.

His 175 was bought from the original owner in 1984. Michael initially intended to leave it tatty, but running, as it was in original condition but untidy when he bought it. The bug had bitten, though, and he decided to pull it apart and do it properly. It was finished in 1986.

After his 100, Tony acquired a 175 Bridgestone, and then in 1977, after a succession of other machinery, a 350 GTR came along. It was a basket case, but the basket did happen to include a manual and a parts catalogue. The bike was running by 1979, but it stayed tatty. In 1986, he decided to have another look at it, with the result that it reached its present faultless condition in 1988, when it was registered.

The restorations obviously involved



some special problems. While it may be hard to track down a part for any old bike, when you try to do it for a motorcycle with such a small production run, it becomes next to impossible. 350 parts were rare enough in their day, and now are like hens' teeth in Australia, while parts for the smaller models are slightly more common. Fortunately, John L. Sullivan Jr in the USA has an almost complete stock of parts, often in original wrapping. While the prices he asks may be high, he has managed to track down everything he has been asked for, even all those little rubber thingummyjigs which are the bane of most restorers.

Apart from the parts situation, there were several other hurdles to be overcome along the way. Many of the small bolts used pre-ISO metric sizings with coarse threads which are now unavailable. Tony's solution was to replace them with stainless items and to grind off the markings on the bolt heads, returning them to visual integrity at least. Chrome work was also a problem. The bores are chromed, and so are difficult to re-work - a common alternative is to fit an iron liner. The pipes are subject to little dings from everyday use and, since they are nigh on unobtainable, they have to be repaired. While doing one such repair job, Tony discovered the quality in a Bridgestone is more than skin deep: the pipes have a layer of copper, then nickel and then three coats of chrome for good measure. They just don't make them like that any more!

Paintwork is another stumbling block. The tanks are fully chromed and then masked and painted. Paint doesn't adhere especially well to chrome, and when the tank is done in candy-apple red, the three layers have a tendency to leave a ridge, which can flake easily around the edge. The solution is to stagger the layers, shifting the



masking tape outwards by 1mm or so as each new layer is applied. It must work, since the GTR's paint is exemplary.

Michael confessed that the major reason he started restoring Bridgestones was that no one else seemed interested. There is a very definite advantage to this, since the total bill for the restoration of the 100 Sport, including the bike itself, came to \$555. The 175 cost \$1200, of which \$460 was for chrome (just to give an idea of the amount used on the bike). The GTR was bought as a basket case - \$120 for the chassis and \$80 for four tea-chests full of unspecified parts. A total of \$3000 saw it in mint condition, registered and on the road. Actually, judging by the photo album Tony kept, I suspect a large part of the cost was taken up by developing all the photos of all the parts laid out neatly on labelled paper.

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Nonetheless, it is nice to see someone going about things in the right way.

One thing which made restoration more enjoyable, if not easier, was the abundance of factory literature available. One title you can't go past is *Bridgestone Motorcycles*. *Tuning Up for Competition*. Not only does it give general information, it provides detailed plans for porting and modifying the disc valves as well as explicit diagrams for expansion chambers. There are several optional states of tune, depending on what you want — a more useful factory manual it would be hard to imagine. By the way, it's subtitled *Quality Machines from Japan*.

There is also the *Optional Parts List for Bridgestone Motorcycles*, which comprises, obviously, a list of all the added extras, from seats and pipes to clip-ons with shortened cables. All in all, 25 pages of fascinating accessories. Whatever happened to this type of manual which didn't just say "Please refer to the nearest authorised dealer . . ." if you decide to replace more than a spark-plug?

The first impression you get when you sit on one of these bikes is of smallness. I rode the 175 Dual Twin first-up and it seemed tiny. We must have made an odd sight — three Bridgies travelling in convoy — but since we had chosen the grounds of a nearby psychiatric hospital for the photographic shoot, I wasn't too concerned!

The Dual Twin got its name from an interesting gearbox set-up. The 100 Sport has a four-speed rotary 'box. That is to say, the shift pattern is neutral-1-2-3-4-neutral-1-2 etc. A peculiar set-up to be sure, but one which works well enough once you get used to it. The Dual Twin also has a fourspeed rotary shift, with one important difference: there is a little lever on the lefthand side of the engine which swaps the gearbox to a five-speed return shift, with neutral at the top, ie neutral-1-2-3-4-5-4-3-2 etc. Because fifth is a real gear and not an over-drive, most of the 175s would have spent their lives in the return-shift mode. Woe betide the rider in rotary shift who, used to having a fifth gear, thought he had a false neutral and shifted straight into first flat out in fourth. There are easier ways to leave big black marks on the asphalt! There are stories of riders who inadvertently knocked the selecting lever into one from the other, with predictable results.

The 350 escaped this little bit of silliness, and had a six-speed, all-down return shift, with a very handy fifth gear yellow warn-





ing light in the speedo — just to let you know you had one more to go. This predated Suzuki's digital gear indicator by a decade or so. One other useful feature of the gearbox was the fact that you could change the gearshift lever to either the right or the left side of the engine, depending on your preference. User-friendly? You bet. In addition, a feature common to all Bridgestones was the use of a separate kick-start gear which allowed you to start the engine while it was still in gear with the clutch pulled in. A very useful feature if you stalled in traffic, and just another example of the thought that went into Bridgestone's design ideas.

It was not without its own peculiarities just the same. The dry (yes, dry) clutch was driven by helical gears and the bike was a real goer. If you dumped the clutch to get a quick getaway, the clutch basket climbed on the gear, and the clutch would refuse to disengage. The normal reaction was to release the throttle a bit, at which point the clutch would let go and the front wheel would be doing its best to get the bike vertical, while the back wheel would be spinning and stepping out sideways. There's nothing like a bit of excitement.

The 175 was a delight to ride, once you accepted the late '60s state-of-the-art technology. The engine was responsive, and, though low-revving by today's standards, provided enough torque and power to make riding the bike a lot easier than the latest pocket-rockets. It is also a relief to swap the racer crouch for a more sedate posture, while still getting respectable performance. Having neutral at the top of the 'box took a little getting used to, but the action was precise and the ratios well-chosen. Ground-clearance is limited, but then the bike is over 20 years old.

The brakes should have proved adequate, but the lining material hadn't bedded in, or else it had hardened with age in any case, the front brakes did little to slow the bike down, so I didn't really get around to any hard charging.

The chassis was well up to coping with the power output, and, given the short nature of the ride, I was more than impressed.

After the photo session, I got to try the 350. It is a lot like the 175, only more so. The only one of the trio to have a revcounter, red-line is marked at 6000rpm, though the bike raced to 8500 before power tailed off. Running up and down through the gears was a pleasure, made easier by the presence of warning lights at both ends of the gearbox (neutral and fifth).

Although the suspension at both ends looks spindly, it coped with my weight (85kg) and the handling, within the limits prescribed by the design, was exemplary. The brakes are well up to handling the 350's increased pace over the smaller bikes. Indeed the GTR would have been one of the fastest, sweetest-handling bikes of its era and capacity.

There was some concern about its reliability at the time, due to the crankcase seals. To allow oil injection to the crankcase, there were two neoprene seals with metal backing just inside the disc valves. The problem was that the housing was only about 1mm deep, and the seals could work loose, catch on the disc valve and a spiral strip of neoprene, followed by similar shavings of metal, would find its way into the port, with predictable results. The normal practice at the time was to remove the seals. This meant that there was no direct feed to the bottom end, and the bike would oil up badly as a result. On the example I rode, Tony had made the better (and easier) modification of locating the seals in place.

Although the machines are in mint condition, and worthy of show trophies, they are not kept in cottonwool. Far from it. In fact, Michael rode the 175 to Albury for last year's VJMC rally in June. The bike ran faultlessly in the wet and freezing weather — well almost faultlessly: there was a small problem with fuel starvation from rust in the tank. The bike would sit on 80-100km/h, but would starve going uphill. Since it was too cold to use tools by the roadside, Michael just persevered, I mean there was little chance of a seizure in that weather!

Unfortunately the situation where parts and knowledge are jealously guarded exists even among the small number of Bridgestone devotees. When Tony needed just one small part to get his bike going, he contacted someone who he knew had several spare engines, only to meet with a blank refusal, which is a bit disheartening. Another time, after Michael and Tony had expressed a strong interest in someone's collection of 19 Bridgestones, they discovered later that he had sold them lock, stock and barrel without so much as a telephone call. Unfortunately this cache represented possibly the last major source of parts in Australia. If you can't trust a fellow enthusiast, what is the world coming to?

Much the same thing happened to me when I was researching this story. When Michael mentioned that he wanted to build a replica of the 100 Vic Honey raced at Bathurst, I tried to get a photo of a similar race bike which I knew existed. The response? "No mate, too much bother."

This is the kind of attitude I can't fathom. Michael already has two of the original Vic Honey heads, as well as a racing seat and other bits and pieces — all he really needs now is information.

I really didn't mean for this story to develop into an harangue, but it really gets my hackles up to see obstructionism rearing its ugly head in what I had hoped was a supportive family of motorcyclists.

Back to business. Having had a chance to ride these amazing machines, I can only repeat what I said at the outset — what a tragedy the Bridgestone name is no longer associated with motorcycles. The world is definitely the poorer for their withdrawal. Many thanks to Lou Emery for commissioning the machines in the first place and to Michael and Tony for making them available.

A postscript: After Bridgestone went bust, all the castings and patterns were acquired by Kawasaki, and so the early bikes from that factory bore a striking resemblance to Bridgies, though without the technical specifications which made the latter so special.